

SCOTT THOMPSON EXECUTIVE DIRECTOR



MARY FALLIN GOVERNOR

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

October 21, 2014



Dear Mr. and Mrs.



The Oklahoma Department of Environmental Quality (DEQ) sampled water from your house well on September 18th, 2014 as part of a reoccurring sampling event that will be performed approximately every three months. DEQ has offered this sampling to residents that live on, or adjacent to the Wilcox Oil Company Superfund Site. You are receiving this letter because you have provided DEQ permission to enter your property and collect a water sample from your well.

DEQ sampled for three types of contaminants that can be found on historical refinery locations. Those are: Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs) and Metals.

The first page of the sampling data is for VOCs. Results of the sampling are located in the Results column. The "<" symbol indicates that the substance was not detected in the sample. The next three pages are for SVOCs, and the last page for Metals. The "<" symbol in the Qualifier column indicates that the substance was not detected. No VOC or SVOC chemicals were detected in the water sample from your well. Several metals were detected at normal levels and are not considered to be a health risk.

The purpose of this sampling event was not to fully define the extent or type of contamination that may be present on the Wilcox Site. All potential health risks from the Site are <u>unknown</u> at this time. Further soil, sediment, surface water and ground water testing will be required in the future to determine how best to clean up the Wilcox Site.

If you have questions about this letter or the sampling data, do not hesitate to call me at (405) 702-5136. Please contact Bart Canellas with the U.S. Environmental Protection Agency at (214) 665-6662 with any questions about the EPA Superfund process or plans for the Wilcox Site.

Sincerely,

Todd Downham

Project Manager, Wilcox Oil Company Superfund Site Land Protection Division Oklahoma Department of Environmental Quality

c. Bart Canellas, U.S. EPA Dallas



State Environmental Laboratory Services Division EPA DRINKING WATER CERTIFICATION #0K00013

General Inquiries: 1-866-412-3057

SAMPLE INFORMATION

Sample Number:

049217.008

Collected By:

Description: Sample Address:

WR-8

Collected:

9/18/14 3:00 pm

Received:

9/19/14 8:34 am

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Analysis:

Volatile Organic Compounds

Analysis Method:

EPA 524.3

Component Name	Result	Unit	Qualifiers	Analyst	Analysis Date
1,1,1-Trichloroethane	<0.5	μg/L		RMA	9/22/14
1,1,2-Trichloroethane	<0.5	μg/L		RMA	9/22/14
1,1-Dichloroethene	<0.5	μg/L		RMA	9/22/14
1,2,4-Trichlorobenzene	<0.5	μg/L		RMA	9/22/14
1,2-Dichlorobenzene	<0.5	μg/L		RMA	9/22/14
1,2-Dichloroethane	<0.5	μg/L		RMA	9/22/14
1,2-Dichloropropane	<0.5	μg/L		RMA	9/22/14
1,4-Dichlorobenzene	<0.5	μg/L		RMA	9/22/14
Benzene	<0.5	μg/L		RMA	9/22/14
Carbon Tetrachloride	<0.5	μg/L		RMA	9/22/14
Chlorobenzene	<0.5	μg/L		RMA	9/22/14
cis-1,2-Dichloroethene	<0.5	μg/L		RMA	9/22/14
Ethylbenzene	<0.5	μg/L		RMA	9/22/14
Methyl tert-Butyl Ether (MtBE)	<0.5	μg/L		RMA	9/22/14
Methylene Chloride	<0.5	μg/L		RMA	9/22/14
Styrene	<0.5	μg/L		RMA	9/22/14
Tetrachloroethene	<0.5	μg/L		RMA	9/22/14
Toluene	<0.5	μg/L		RMA	9/22/14
trans-1,2-Dichloroethene	<0.5	μg/L		RMA	9/22/14
Trichloroethene	<0.5	μg/L		RMA	9/22/14
Vinyl Chloride	<0.5	μg/L		RMA	9/22/14
Xylenes	<0.5	μġ/L		RMA	9/22/14

Sample Number: 540035 Project Code: SW-WE

Agency Number:

Date Collected: 9/18/2014
Time Collected: 1500
Date Received: 9/19/2014
Date Completed: 09/25/2014

Collected By:

PWS Id:

Location Code:

Station: Facility:

Report Date: 9/25/2014

To: TODD DOWNHAM/LPD

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE ENVIRONMENTAL LABORATORY

707 N. ROBINSON OKLAHOMA CITY

OKLAHOMA, 73102-6010General Inquiries: 1-866-412-3057

or selsd@deq.ok.gov

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

RECOUNTED

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SEP 29 2014

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Senaphthylene	Name	Qualific	er	Value	Units	Analyzed	Method	Prep Type
18.6	Dilution Factor, Extractab			0.93		09/23/14		
Semaphthene	Acenaphthylene		<	18.6	UG/L	09/23/14	8270DM	
enzo (b) fluoranthene	Acenaphthene		<	18.6	UG/L	09/23/14	8270DM	
enzo(k)fluoranthene	Anthracene		<	18.6	UG/L	09/23/14	8270DM	
enzo(a)pyrene	Benzo(b)fluoranthene		<	18.6	UG/L	09/23/14	8270DM	
18.6 UG/L	Benzo(k)fluoranthene		<	18.6	UG/L	09/23/14	8270DM	
18.6	Benzo(a)pyrene	•	<	18.6	ng/r	09/23/14	8270DM	4
18.6 UG/L	Bis(2-chloroethyl)ether		<	18.6	UG/L	09/23/14	8270DM	
18.6	Bis(2-chloroethoxy)methane		<	18.6	UG/L	09/23/14	8270DM	
hrysene	Bis(2-chloroisopropyl)ethe		<	18.6	ÚG/L	09/23/14	8270DM	
18.6 UG/L 09/23/14 8270DM 18.6	Butylbenzylphthalate		<	18.6	UG/L	09/23/14	8270DM	
18.6	Chrysene		<	18.6	UG/L	09/23/14	8270DM	
18.6 UG/L 09/23/14 8270DM 18.6	Diethylphthalate		<	18.6	UG/L	09/23/14	8270DM	
18.6	Dimethylphthalate		<	18.6	UG/L	09/23/14	8270DM	
exachlorocyclopentadiene UJ < 18.6 UG/L 09/23/14 8270DM exachloroethane in water < 18.6 UG/L 09/23/14 8270DM deno(123cd)pyrene UJ < 18.6 UG/L 09/23/14 8270DM sophorone < 18.6 UG/L 09/23/14 8270DM ditrosodipropylamine < 18.6 UG/L 09/23/14 8270DM ditrosodiphenylamine < 18.6 UG/L 09/23/14 8270DM ditrosodiphenylamine < 18.6 UG/L 09/23/14 8270DM ditrobenzene < 18.6 UG/L 09/23/14 8270DM ditrobenzene < 18.6 UG/L 09/23/14 8270DM denanthrene < 18.6 UG/L 09/23/14 8270DM denanthrene < 18.6 UG/L 09/23/14 8270DM denanthrene < 18.6 UG/L 09/23/14 8270DM denzo(ghi)perylene < 18.6 UG/L 09/23/14 8270DM denzo(ghi)perylene < 18.6 UG/L 09/23/14 8270DM denzo(a)anthracene < 18.6 UG/L 09/23/14 8270DM denzo(a)anthracene < 18.6 UG/L 09/23/14 8270DM denzo(ah)anthracene denzo(ah)anthracene < 18.6 UG/L 09/23/14 8270DM denzo(ah)anthracene denzo(ah)anthracene < 18.6 UG/L 09/23/14 8270DM denzo(ah)anthracene denzo(ah)anthracene denzo(ah)anthracene denzo(ah)anth	Fluoranthene		<	18.6	UG/L	09/23/14	8270DM	
exachloroethane in water < 18.6 UG/L 09/23/14 8270DM addeno (123cd) pyrene UJ < 18.6 UG/L 09/23/14 8270DM apphorone < 18.6 UG/L 09/23/14 8270DM approximately considered approximately considered < 18.6 UG/L 09/23/14 8270DM approximately considered < 18.6 UG/L 09/23/14 8270D	Fluorene		<	18.6	UG/L	09/23/14	8270DM	
exachloroethane in water	Mexachlorocyclopentadiene	UJ	<	18.6	UG/L	09/23/14	8270DM	
18.6 UG/L 09/23/14 8270DM 18.6	Mexachloroethane in water		<	18.6	\mathtt{UG}/\mathtt{L}	09/23/14	8270DM	
18.6 UG/L 09/23/14 8270DM 11 18.6 UG/L 09/23/14 8270DM 12 18.6 UG/L 09/23/14 8270DM 13 18.6 UG/L 09/23/14 8270DM 14 18.6 UG/L 09/23/14 8270DM 18.6 UG/L 09/2	Indeno (123cd) pyrene	υJ	<	18.6	UG/L	09/23/14	8270DM	
itrosodipropylamine	Isophorone		<	18.6	UG/L	09/23/14	8270DM	
itrosodiphenylamine < 18.6 UG/L 09/23/14 8270DM itrobenzene < 18.6 UG/L 09/23/14 8270DM -Chloro-m-cresol < 18.6 UG/L 09/23/14 8270DM henanthrene < 18.6 UG/L 09/23/14 8270DM yrene < 18.6 UG/L 09/23/14 8270DM enzo(ghi)perylene < 18.6 UG/L 09/23/14 8270DM enzo(a)anthracene < 18.6 UG/L 09/23/14 8270DM enzo(a) anthracene < 18.6 UG/L 09/23/14 8270DM -Chloronaphthalene < 18.6 UG/L 09/23/14 8270DM -Chlorophenol < 18.6 UG/L 09/23/14 8270DM	Nitrosodipropylamine		<	18.6	UG/L	09/23/14	8270DM	
18.6 UG/L 09/23/14 8270DM 18.6	Nitrosodiphenylamine		<	18.6	UG/L	09/23/14	8270DM	
18.6 UG/L 09/23/14 8270DM 18.6 UG/L	Vitrobenzene		<	18.6	UG/L	09/23/14	8270DM	
yrene <	o-Chloro-m-cresol		<	18.6	UG/L	09/23/14	8270DM	
enzo(ghi)perylene < 18.6 UG/L 09/23/14 8270DM enzo(a)anthracene < 18.6 UG/L 09/23/14 8270DM ibenzo(ah)anthracene < 18.6 UG/L 09/23/14 8270DM -Chloronaphthalene < 18.6 UG/L 09/23/14 8270DM -Chlorophenol < 18.6 UG/L 09/23/14 8270DM -Nitrophenol < 18.6 UG/L 09/23/14 8270DM	Phenanthrene		<	18.6	UG/L	09/23/14	8270DM	
enzo(a)anthracene < 18.6 UG/L 09/23/14 8270DM ibenzo(ah)anthracene < 18.6 UG/L 09/23/14 8270DM -Chloronaphthalene < 18.6 UG/L 09/23/14 8270DM -Chlorophenol < 18.6 UG/L 09/23/14 8270DM -Nitrophenol < 18.6 UG/L 09/23/14 8270DM	Pyrene		<	18.6	UG/L	09/23/14	8270DM	
ibenzo(ah)anthracene < 18.6 UG/L 09/23/14 8270DM -Chloronaphthalene < 18.6 UG/L 09/23/14 8270DM -Chlorophenol < 18.6 UG/L 09/23/14 8270DM -Nitrophenol < 18.6 UG/L 09/23/14 8270DM	Benzo(ghi)perylene		<	18.6	UG/L	09/23/14	8270DM	
-Chloronaphthalene < 18.6 UG/L 09/23/14 8270DM -Chlorophenol < 18.6 UG/L 09/23/14 8270DM -Nitrophenol < 18.6 UG/L 09/23/14 8270DM	Benzo(a)anthracene		<	18.6	UG/L	09/23/14	8270DM	
-Chlorophenol < 18.6 UG/L 09/23/14 8270DM -Nitrophenol < 18.6 UG/L 09/23/14 8270DM	Dibenzo(ah)anthracene		<	18.6	UG/L	09/23/14	8270DM	
-Nitrophenol < 18.6 UG/L 09/23/14 8270DM	-Chloronaphthalene		<	18.6	UG/L	09/23/14	8270DM	
-Nitrophenol < 18.6 UG/L 09/23/14 8270DM	-Chlorophenol		<	18.6	UG/L	09/23/14	8270DM	
i-n-octylphthalate < 18.6 UG/L 09/23/14 8270DM	-Nitrophenol		<	18.6	UG/L	09/23/14	8270DM	
	Di-n-octylphthalate		<	18.6	UG/L	09/23/14	8270DM	

Sample Number: 540035 Project Code:

Agency Number:

Date Collected: 9/18/2014 Time Collected: 1500 Date Received: 9/19/2014

Date Completed: 09/25/2014

Collected By:

PWS Id:

Location Code:

Station: Facility:

Report Date: 9/25/2014

To: TODD DOWNHAM/LPD

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE ENVIRONMENTAL LABORATORY

707 N. ROBINSON **OKLAHOMA CITY** OKLAHOMA, 73102-6010

General Inquiries: 1-866-412-3057 or selsd@deq.ok.gov

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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Name	Qualifie	er	Value	Units	Analyzed	Method	Prep Type
2,4-Dichlorophenol		<	18.6	UG/L	09/23/14	8270DM	
2,4-Dimethylphenol		<	18.6	UG/L	09/23/14	8270DM	
2,4-Dinitrotoluene		<	18.6	UG/L	09/23/14	8270DM	
2,4-Dinitrophenol	UJ	<	18.6	UG/L	09/23/14	8270DM	
2,4,6-Trichlorophenol		<	18.6	UG/L	09/23/14	8270DM	
2,6-Dinitrotoluene	UJ	< .	18.6	\mathtt{UG}/\mathtt{L}	09/23/14	8270DM	
3,3'-Dichlorobenzidine		<	18.6	UG/L	09/23/14	8270DM	
4-Bromophenylphenyl ether		<	18.6	UG/L	09/23/14	8270DM	
4-Chlorophenyl phenylether		<	18.6	UG/L	09/23/14	8270DM	
4-Nitrophenol		<	18.6	UG/L	09/23/14	8270DM	
4,6-Dinitro-o-cresol		<	18.6	UG/L	09/23/14	8270DM	
Phenol		<	18.6	UG/L	09/23/14	8270DM	
Naphthalene		<	18.6	UG/L	09/23/14	8270DM	
Pentachlorophenol		<	18.6	UG/L	09/23/14	8270DM	
Bis(2-ethylhexyl)phthalate		<	18.6	UG/L	09/23/14	8270DM	
Di-n-butylphthalate		<	18.6	UG/L	09/23/14	8270DM	
Hexachlorobenzene		<	18.6	UG/L	09/23/14	8270DM	
Hexachlorobutadiene		<	18.6	UG/L	09/23/14	8270DM	-
Dibenzofuran		<	18.6	UG/L	09/23/14	8270DM	
2-Methylnaphthalene		<	18.6	UG/L	09/23/14	8270DM	
2-Methylphenol		<	18.6	UG/L	09/23/14	8270DM	
4-Methylphenol		<	18.6	UG/L	09/23/14	8270DM	
2,4,5-Trichlorophenol		<	18.6	UG/L	09/23/14	8270DM	
4-Chloroaniline		<	18.6	UG/L	09/23/14	8270DM	
2-Nitroaniline		<	18.6	UG/L	09/23/14	8270DM	
3-Nitroaniline		<	18.6	ΰG/L	09/23/14	8270DM	
4-Nitroaniline		<	18.6	UG/L	09/23/14	8270DM	
1,4-Dichlorobenzene		<	18.6	UG/L	09/23/14	8260BM	
1,2,4-Trichlorobenzene		<	18.6	UG/L	09/23/14	8260BM	

				·		
1	CITED	<i>C</i> እጥም	RECOVERIES			
i		QL I	KECO VERTED	RECOVERY	%	
1	COMPOUND			MECO (Ditt	0	

2-FLUOROPHENOL

NITROBENZENE-D5

35

42

Sample Number: 540035 Project Code: SW-WE

Agency Number:

Date Collected: 9/18/2014 Time Collected: 1500 Date Received: 9/19/2014 Date Completed: 09/25/2014

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

CC: FILE COPY

COMPOUND	SURROGATE RECOVERIES	RECOVERY 9	5
2,4,6-TRIBROMOPHENOL		80	
2-FLUOROBIPHENYL		47	•
PHENOL-D5		27	
P-TERPHENYL-D14		67	
COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS

	TENTATIVELY	IDENTIFIED BY			
COMPOUND	NBS LIBRARY	SEARCH	VALUE	UNITS	
L					

N/A

Summary

Labs performing analysis on this Sample:

Metals

GCMS

SOURCE: WILCOX - 292119515

SAMPLERS COMMENTS:

WR-8

SAMPLE RECEIVING COMMENTS:

ICE; SAMPLE TEMP = 6.1C

ANALYST'S COMMENTS:

Rachel M. Allen (8270DM). Analyzed.

Sample received on ice during the cooling down phase. (UJ) The material was analyzed for but was not detected at or above the reporting limit (RL). The associated value is an estimate and may be inaccurate or imprecise due to (QCF) Quality Control failure.

Sample Number: 540035 Project Code: SW-WE

Agency Number:

Date Collected: 9/18/2014 Time Collected: 1500 Date Received: 9/19/2014 Date Completed: 10/17/2014

Collected By:

PWS Id:

Location Code:

Station: Facility:

Report Date: 10/17/2014

To: FILE COPY

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE ENVIRONMENTAL LABORATORY

707 N. ROBINSON **OKLAHOMA CITY** OKLAHOMA, 73102-6010

General Inquiries: 1-866-412-3057

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Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

CC: TODD DOWNHAM/LPD

Name	Qualifie	r	Value	Units	Analyzed	Method	Prep Type
Arsenic, Total		<	2.00	UG/L	10/15/14	200.8	
Barium, Total			73.3	UG/L	10/15/14	200.8	
Beryllium, Total		<	2.00	ΰG/L	10/15/14	200.8	
Cadmium, Total		<	2.00	UG/L	10/15/14	200.8	
Chromium, Total			6.70	UG/L	10/15/14	200.8	
Copper, Total		<	5.00	UG/L	10/15/14	200.8	
Lead, Total		<	5.00	UG/L	10/15/14	200.8	
Thallium, Total		<	1.00	UG/L	10/15/14	200.8	
Nickel, Total		<	10.0	UG/L	10/15/14	200.8	
Silver, Total		<	10.0	UG/L	10/15/14	200.8	
Zinc, Total	OT	<	10.0	UG/L	10/15/14	200.8	
Antimony, Total		<	2.00	UG/L	10/15/14	200.8	
Selenium, Total		<	10.0	UG/L	10/15/14	200.8	
Mercury, Total		<	0.05	UG/L	10/14/14	200.8	

Summary

Labs performing analysis on this Sample:

Metals

GCMS

SOURCE: WILCOX - 292119515

SAMPLERS COMMENTS:

WR-8

SAMPLE RECEIVING COMMENTS: ICE; SAMPLE TEMP = 6.1C

ANALYST'S COMMENTS:

(OT) Other Zn results possibly biased low.

* ANALYST

Greg Goode

State Environmental Laboratory